

Draft

Statistical Summary of Low-Flow Nutrient Data for the non-tidal Christina River

Station	DA sq mi	Q7-10 cfs	Q-20% (Annual)	Data Period		Total Phosphorus mg/L	Soluble Ortho P mg/L	NO2+NO3-N mg/L	NH3-N mg/L				
						lb/d	lb/d	lb/d	lb/d				
East Branch Above Rt 273	3.16	0.33**	1.0*	1993-1997	Median UQ LQ Max Min n	0.034 0.035 0.026 0.093 0.016 5	0.07 0.10 0.06 0.39 0.05 5	0.013 0.016 0.010 0.021 0.010 5	0.04 0.05 0.03 0.09 0.02 5	1.75 1.83 1.19 2.16 0.98 5	6.4 7.1 5.6 9.1 1.5 5	0.02 0.03 0.02 0.03 0.01 5	0.67 0.07 0.05 0.09 0.04 5
West Branch at Rt 2	5.27	0.55***	1.6*	1980-1993	Median UQ LQ Max Min n	0.09 0.13 0.06 1.60 0.03 28	0.4 0.8 0.3 10.5 0.1 28	0.04 0.07 0.00 0.07 0.00 3	2.2 7.2 1.9 7.2 1.9 3	1.95 2.64 1.40 4.77 0.60 28	9.1 16.4 5.7 32.2 1.3 28	0.10 0.10 0.10 0.35 0.01 28	0.5 0.8 0.4 2.5 0.0 28
Cooch's Bridge	21.06	2.23***	6.5	1993-1997	Median UQ LQ Max Min n	0.045 0.051 0.040 0.097 0.008 10	0.9 1.2 0.4 2.6 0.2 10	0.018 0.026 0.013 0.029 0.006 10	0.4 0.7 0.2 0.8 0.1 10	1.36 1.46 1.33 1.89 0.66 10	31 38 15 49 13 10	0.04 0.04 0.03 0.07 0.01 10	0.7 1.0 0.4 1.9 0.3 10
Muddy Run/ Becks Pond	8.66	0.92*	2.7*	1980-1993	Median UQ LQ Max Min n	0.07 0.10 0.05 0.55 0.03 32	0.6 1.2 0.4 3.8 0.1 32	0.016 0.026 0.013 0.029 0.006 1	0.2 0.7 0.2 0.8 0.1 1	0.12 0.21 0.11 0.97 0.03 32	1.05 2.4 0.8 10.5 0.3 32	0.10 0.15 0.10 0.85 0.03 32	1.0 1.4 0.7 12.2 0.3 32
Smalley's Pond	46.8	3.32**	9.4***	1993-1997	Median UQ LQ Max Min n	0.07 0.082 0.06 0.108 0.021 10	2.6 4.9 1.8 7.6 0.7 10	0.012 0.017 0.008 0.033 0.004 10	0.6 0.7 0.3 2.3 0.1 10	0.67 0.796 0.466 1.73 0.32 10	24.8 48 18.2 121.9 9.4 10	0.082 0.112 0.064 0.176 0.019 10	2.6 6.6 2.1 7.7 1.1 10

Note: * Estimates based on product of drainage area ratio and flow rate for Cooch's Br.

** Based on Q7-10 reported for Smalley's Pond in Piedmont Basin Report (DNREC 1997)

*** Based on ratio of Smalley's/ Cooch's Flow of 1.45 (UD-WRA) and drainage area ratios.